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ABSTRACT

Serving as teacher orientation materials for the cooperative programs in residential outdoor education located in Marin County, California, this guide includes the following: (1) "This I Believe" (a philosophical statement on outdoor environmental education); (2) "Outdoor Science and Conservation Education Report" (a brief history of outdoor education; the legality of outdoor environmental education; a description of the objectives, study areas, and activities included in the Marin County program; and the historical development of the Marin program); (3) "Roles and Responsibilities of the Classroom Teacher" (specifics re: class preparation, cabin grouping, pre-outdoor activities, curriculum planning, teacher participation, and classroom follow-up); (4) "Outdoor Education Activity: A One-Week Sequence" (exemplifies the way in which the outdoors may be used as a learning environment and includes educational objectives re: stream, meadow, chaparral, tide pool, ocean, forest, and marsh environments); (5) "Along the Way: A Route to Marin County's Resident Outdoor School" (includes a map of the San Francisco Bay Area and a narrative describing major points of interest in terms of their environmental history); (6) the parental permission and health forms used by the Marin County Schools Outdoor Science and Conservation Education Program. (JC)

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OUTDOOR ENVIRONMENTAL EDUCATION

TEACHER'S MATERIALS PACKET

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THIS I BELIEVE

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A One-Week Sequence

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(To be used by teachers on the school bus)

***

LETTER TO PARENTS
(Provided in sufficient numbers for each student)

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HEALTH FORM
(Provided in sufficient numbers for each student)

RC009504

Office of
Virgil S. Hollis, Marin County Superintendent of Schools
201 Tamal Vista Blvd., Corte Madera, Ca. 94925

THIS I BELIEVE

Statement:

Resident outdoor environmental education is inherently good education for all age levels. It is a subject that should be taught in the natural environment and is applicable to many areas of the school curriculum. Outdoor education is always school directed and is an integral topic in the school curriculum.

Benefits derived from the outdoor school experiences are realistic, direct, and first-hand experiences. Outdoor school experiences strengthen and reinforce previous learnings. Many units of study are developed as a direct result of a district school participation. For example: Arithmetic -- the saving and banking of monies to cover outdoor school costs, with its attendant learnings, makes banking a real adventure. History and geography take on new life as students check maps to learn the route to the outdoor school, the areas through which they will pass, their origins, people, industry, etc.

Resident outdoor environmental education, which had its beginnings in central Europe, is the ultimate in gaining the most meaning from an outdoor educational experience. The resident outdoor school should be a part of the program of every school district. The central focus of outdoor education is ecological understanding and conservation education, and this is the primary justification for its place in the public school program. All states should have laws requiring environmental education to be taught at all grade level.

Since man first appeared on this earth, he has walked through life taking what was needed, many times to the ruination of the natural order of things. He has only recently realized that it is not his right to control nature, but rather his responsibility to live in harmony with nature. Understanding ecological order (nature's way) is a must if he is to continue to grow and progress. This concept ecological order, is paramount among the long range goals of the resident outdoor school.

ERNEST C. WHITE
Consultant, Outdoor Education
Marin County Superintendent
of Schools Office

A RESUME' OF REDWOOD GLEN

Marin County's resident outdoor school

The Marin County Superintendent of Schools program of outdoor education is conducted at the Redwood Glen Baptist Camp & Conference Grounds, located in the Montaro Hills of the Santa Cruz Mountains near Pescadero, California. This site offers a beautiful setting for an outdoor school. It is composed of 161 acres covered with redwoods, madrone, buckeye, oaks and chaparral. There are two streams that run through the property. The promimity to the ocean (10 miles) offers opportunities to include marine biology in the outdoor school curriculum, and a school bus is maintained on the site for this purpose. The site boasts five sleeping cabins, each with two rooms separated by toilet and shower facilities. Each room sleeps eight (8) children, utilizing double-deck bunks. Other sleeping areas are available; however, they are not self-contained.

A beautiful dining room, overlooking an olympic-size swimming pool, will seat up to 250 people very comfortably. A lodge building with inside plumbing and a large fireplace offers comfortable living quarters for outdoor school staff and visiting classroom teachers. Another building on the site is more than suitable for a science room, museum and craft room.

The site is criss-crossed with many trails that give us entrance into the forest to carry out the outdoor school curriculum.

We are contracting for Redwood Glen at a cost of $21.75 per capita.

As presently projected, the cost to districts sending students to the outdoor school for 1973-74 will be $43.25 per student with a guarantee of 100 students per week. The $43.25, which includes the $21.75, provides enough income to cover salaries for outdoor school staff, student insurance, lodging, food and food services. Transportation to and from the outdoor school is assumed by the contracting district.

The outdoor school staff consists of a principal for the outdoor school, five (5) naturalists--responsible for interpreting the out-of-doors to students, and six (6) cabin leaders whose primary responsibility is the health, welfare and safety of the students in the cabins. Cabin leaders are augmented each week by high school and college student volunteers.

The major emphasis of our program is now directed to the environment--man's use and misuse.

Our recent successful excursions in space have presented us with opportunities to present the concept of the earth, as a home, to students in a clear and concise manner.

OUTDOOR SCIENCE AND CONSERVATION EDUCATION

Historically education went indoors for protection from the weather and for the convenience of those doing the instruction. It did not go indoors because there, and only there, could education take place. On the contrary, it has always been known that certain phases of learning could best be accomplished in direct contact with nature's elements. In the modern complex organization of the processes of education, many times the mistake has been made of assuming that the traditional four walls of the classroom are synonomous with instruction and essential thereto. The pressures of modern living, rapid urbanization of population, and the monotony of a mechanical world have created a need for a return to the land. This need can be dramatically expressed by:

1) Polution of streams with refuse of great cities and industrial plants.

2) Wanton destruction of wild game and bird life.

3) City streets and fertile farm lands submerged in muddy flood waters.

4) Clouds of smoke and smog over crowded cities poluting the air we breathe.

5) Lowering water tables.

6) Acres of abandoned litter on roads and highways.

7) A seemingly endless construction that calls for an evergrowing amount of materials.

In 1940 the Kellogg Foundation sponsored a community school camp in Michigan. This experimental program was followed by widespread study and further trials with this new approach to education. In 1946 the San Diego City and County program called "California's Pilot Project" marked the first outdoor school effort in this state. The outdoor education workshop at Camp Palomar in San Diego County in 1950 was important in launching a rapid succession of other outdoor school projects over the state. One of the most promising trends is the enthusiastic support and promotional leadership given the movement by county superintendents of schools and their staffs. Through their instrumentality, school districts with limited resources can offer participation with other districts in providing facilities, leadership, and program development. The California State Department of Education has provided leadership and encouragement to the movement since its inception. The State Department of National Resources is another department with sustained interest in outdoor education..

LEGALITY OF OUTDOOR EDUCATION

Outdoor science and conservation has had a steady and logical development in many California schools since the enactment of the outdoor science and conservation education laws in 1951 and 1958. These laws are contained in the California Education Code in sections 6011 and 6013. The 1951 law (6011) authorized the governing board of any school district to: (1) conduct programs and classes; (2) acquire and maintain real and personal property; (3) contract with any city, county, or school district; and (4) transport or arrange transportation of pupils, instructors or other personnel to the outdoor school. The 1958 Law (6013) allowed the county superintendent of schools to enter into an agreement with governing boards of any school district to provide programs and classes in outdoor science education and conservation education for pupils in the district of the sixth grade or any higher grade.

Educators generally agree on two basic purposes in education. The first is individucal -- to help each child develop to his utmost capacity in body, mind, spirit, and character, and in personal, home, economic and civic competence. The second is social -- to educate each generation so that it can make progress in coping with the problems of the community, the state, the nation, and the world. Educational experiences in the out-of-doors help children interpret, use wisely, and conserve the natural environment. These experiences accelerate learning, reinforce and strengthen previous learnings, and enrich and extend the ongoing classroom program. Participation in an outdoor education program certainly represents a very valuable part of the total effort to provide experiences helpful for the growth of children. One of the demands of education is that it should be concerned with the "entire" child i.e., concerned with his emotional, intellectual, social, physical, and moral growth. This pre-occupation is paramount among the general or long range objectives of the outdoor education program.

Outdoor Education is a good D.E.A.L. (Direct Experience Approach to Learning).

THE PROGRAM

A program of activities in the outdoor school for a one week period is based on the on the following guidelines:

1) To make maximum use of the outdoors and even center the necessary indoor activities around outdoor environments.

2) To insure pupil participation in the total program - planning, execution, and evaluation.

3) To take full advantage of natural phenomena and historical use of the area.

4) To provide learning by discovery, direct experience, and adventure.

5) To emphasize the processes of cooperation and fair treatment.

6) To supplement and extend, rather than duplicate the regular classroom program.

7) To incorporate approved conservation practices in all activities.

8) To relate and understand the forces of nature to successful community life.

9) To be centered in children's interests and needs.

Each week's program should include the following areas of study:

1) The nature of the physical world.

2) Various life forms.

3) The relationship between living and non-living elements.

4) Weather and climate.

5) The universe.

6) Man's responsibility in the environment.

A day's program will usually include two short nature walks or a longer one with a picnic lunch followed by an in-school activity. Each activity must have a purpose that is understood by the children and plans should always be made to visit a variety of areas. Sometime during the week the children should have a work experiment in conservation. This is the time for assuming personal responsibility for the welfare of the outdoor school, for future students, and for the natural community. The evening campfire programs are times for enjoyment and inspiration. They may include stories, skits, discussions lead by the teachers, talks by invited guests, or star study activities. Such activities as folk or square dancing are also planned for part of this time. This is the time also to relate the days experiences to emerging science concepts, to think about moral and spiritual values, and to plan for personal improvement. Above all, it is the time to feel the warmth of group living, in the out-of-doors.

DEVELOPMENT OF MARIN COUNTY'S PROGRAM

During the 1963-64 school year under the leadership of Dr. Virgil S. Hollis, Marin County Superintendent of Schools, a pilot program in outdoor education was conducted. This first program involved 120 students from the Sausalito School District. The success of the experiment was evidenced by unanimous agreement of all concerned to expand this program the following year. A specialist was hired to direct the program. The second year involved eleven weeks of operation and almost 500 students. Further expansion was planned for the following year, and to that end a full time director and principal for the outdoor school was hired as a member of the Marin County Superintendent of Schools staff. The third year saw 20 weeks of operation with more than 1200 students involved in the outdoor education program. It is the hope of the Marin County Schools staff that this program will be expanded to include a full year of operation of at least 32 weeks involving approximately 3000 students.

From 1964 to 1966 the Marin County program was conducted on a site located in the enchanted hills section in Napa County. This site was owned and leased to us by the San Francisco Division of the Lighthouse for the Blind. We came to call this site Lokoya School. In June, 1966 we were informed by the owners of the Lokoya site that it would no longer be available to us. A search for another was started and it was agreed by the County Schools Office and the Outdoor Education Advisory Committee that we should enter into contract negotiations with the Northern California Baptist Convention for its Redwood Glen site in San Mateo County.

This site offers a beautiful setting for an outdoor school. It is composed of 161 acres covered with redwoods, madrone, buckeye, oaks, and some chaparral. There are two streams that run through the property. The proximity to the ocean offers opportunities to include marine biology in the outdoor school curriculum. The site boasts five sleeping cabins each with two rooms separated by sanitary facilities and shower facilities. Each room will sleep eight children utilizing double deck bunks. A beautiful dining room will feed up to 250 people very comfortably. A lodge building with inside plumbing, and a large fireplace offers comfortable living quarters for outdoor school staff and classroom teachers. The site is criss-crossed with many trails that give us entrance into the forest to carry out the outdoor school curriculum. It is bordered on the east by the Oakland YMCA camp, and on the west by the San Mateo County Memorial Park.

ROLES & RESPONSIBILITIES OF THE CLASSROOM TEACHER

A. THE CLASSROOM TEACHER

The classroom teacher assumes a key responsibility for developing and carrying out a suitable and effective outdoor school program. Performance of these duties requires that the classroom teacher:

1. Accompany his class to the outdoor school.

2. Contribute special knowledge regarding:

    a. The abilities of the children.
    b. Their physical and mental level of maturity.
    c. The experiences the children have had.

3. Assume responsibility for three categories of the outdoor school curriculum:

    a. Preparation (Pre-Outdoor Education School)
    b. Attendance (Outdoor Education School)
    c. Continuation (Post-Outdoor Education School)

B. PREPARATION OF THE CLASS FOR THE OUTDOOR SCHOOL

One of the classrom teacher's most important contributions to an effective outdoor school experience for the class is to develop a sound attitude on the part of the children toward the trip and the social living experiences planned for them. The classroom teacher should:

1. Emphasize the school aspect, stressing the fact that outdoor school is as much a part of the school as are regular classroom activities.

2. Discuss attitudes, responsibilities and rules, especially why various rules are instituted. (Reasons should include health, safety and assurance of individual and group rights and responsibilities.)

3. Study the outdoors and stimulate interest in it.

4. Distribute the requisite forms (Letter to Parents and Health Form), and see that they are understood and filled out properly.

    a. Emphasize that purchase of new clothing or equipment is <u>not</u> necessary; reasonable substitution is acceptable.

    b. Stress the importance of listing any health or physical problem on the Health Form.

    c. Check with the district coordinator when there is a question as to whether a child should attend.

C. PREPARE CABIN GROUPING FORMS FOR THE OUTDOOR SCHOOL PRINCIPAL

1. The outdoor school operates in five (5) trail groups. All girls should be divided equally into five (5) cabin groups, and all boys should be divided equally into five (5) cabin groups. A trail group is created by combining a cabin group of girls and a cabin group of boys.

2. Ideally, children are grouped according to choice, but sometimes cliques have a tendency to cause mischief. When necessary, cliques should be broken up and care should be taken to see that children having personality conflicts with other children should not reside together.

D. PRE-OUTDOOR SCHOOL ACTIVITIES

Two categories of activities are involved in preparing for the outdoor school: receiving information and giving information.

1. Classroom teachers receive assistance from the County Superintendent of Schools Office in the following ways:

   a. Requisite forms are provided in quantity.
      Letters to Parents
      Health Forms
      Materials Packet

   b. The outdoor school consultant-coordinator, upon request, and when possible, will visit the class to explain the program and answer questions.

   c. The outdoor school consultant-coordinator, if requested, will meet with parents and others involved in the program to discuss the purposes, values, schedule, etc., and offer suggestions for preparation to make the children's stay at outdoor school a happy and profitable experience.

E. CURRICULUM PLANNING

Preparation of the pupils for their experience differs from class to class because of the school district, the individual teacher, and the personalities of the children in the class. Following are some suggestions teachers may use in preparing a class for outdoor school:

1. Find out about the outdoor school -- where it is on a map, what it looks like from pictures and slides, how to get there by charting the route on a map.

2. The teacher and class together may plan an itinerary for the study trip to outdoor school and return, including educational opportunities such as historical landmarks, picturesque and modern buildings, industrial developments, modes of transportation and communication, vineyards, agriculture, examples of good and bad conservation practices, changes in land features from the valley to the foothills and mountains.

3. Use appropriate audio-visual materials.

4. Become familiar with conservation and natural science terms.

5. Help the class raise questions and find the answers about water cycle, erosion, how plants grow, what animals eat, what causes mountains, what stars are, etc. Outdoor school will supplement what has already been taught.

6. Talk about health practices.

7. Talk about table manners.

8. Talk about living in groups with other boys and girls.

F. PARTICIPATION OF THE CLASSROOM TEACHER

The benefits children receive from their outdoor school experiences depend to a large extent on the classroom teacher's alertness to the opportunities offered and his role in the activities of his class at the outdoor school.

The teacher accompanies his pupils to the outdoor school and observes them in action under the guidance and instruction of outdoor school teachers and in recreational and social situations with trained cabin staff. As an observer, circulating among his pupils and offering assistance and counsel wherever practical, the classroom teacher is in an excellent position to gain valuable knowledge regarding the children in his class and to plan for continuation of the learning when the class returns to the home classroom. This is an opportunity for relationships with the class which are unique to this kind of living situation.

G. CONTINUATION OF OUTDOOR SCHOOL LEARNING

The classroom teacher's creativeness and ingenuity are keys to the success of outdoor school follow-up activities. Gains obtained from post-outdoor school depend largely on the classroom teacher's skill in taking advantage of the stimulated interests and the cooperative mood of the children when they return from outdoor school to strengthen and supplement what was learned during the week.

The goal of the classroom teacher when the class returns to the regular classroom should be to integrate outdoor school learnings in science, conservation, social living, etc., with the classwork during the remainder of the school year. Outdoor school experiences may serve to enrich reading and provide material for creative writing, art work, music, hobbies, etc. In nearly every area projects may be undertaken to continue and expand the learning experiences of the outdoor school.

WHAT YOU CAN DO ABOUT THE ENVIRONMENTAL CRISIS

TAKE A BUS
RIDE A TRAIN
JOIN A CAR POOL
BUY A SMALL CAR

RIDE A BIKE
TRY WALKING

WRITE YOUR CONGRESSMAN
YOUR LEGISLATOR
WRITE THEM AGAIN
CALL YOUR COUNCILMAN
CALL THE MAYOR
GO TO A MEETING

ASK FOR ANSWERS
ASK FOR ACTION

DON'T BELIEVE SIMPLE ANSWERS
ASK HOW
ASK WHEN
KEEP A RECORD
VOTE ACCORDINGLY
JUST VOTE

CLEAN UP A PARK
CREATE A PARK
PLANT A TREE
PLANT A THOUGHT

PICK UP A WRAPPER
RETURN YOUR EMPTIES
ORGANIZE A PAPER DRIVE

JOIN A GROUP
START A GROUP

LISTEN TO THE KIDS
TALK TO YOUR FRIENDS
MAKE A SPEECH

READ A BOOK
LEARN THE FACTS
WRITE THE EDITOR
THINK FIRST

STOP AT TWO
ADOPT A THIRD

LOVE YOUR COUNTRY
DON'T LEAVE IT, FIX IT UP

TAKE A PICTURE
SHOW IT TO SOMEBODY

DON'T WEAR WILD FURS
BOYCOTT CROCODILE PRODUCTS

BREATHE DEEPLY
COUGH
GET MAD

STOP A DAM
REPORT A POLLUTER
COMPLAIN TO THE COMPANY

GET THE LEAD OUT
DO YOUR THING
KNOW YOUR RIGHTS
GET RIGHT WITH NATURE
CHANGE SOME LAWS

THINK WHAT MIGHT BE
ASK WHY NOT

SMELL A FLOWER
FEEL THE BARK
WATCH A BIRD
LISTEN TO THE INSECTS
DIP YOUR FEET IN A BROOK

NOW ISN'T THERE SOMETHING YOU CAN DO?

RECYCLE THIS TO A FRIEND

OUTDOOR EDUCATION ACTIVITY

A One-Week Sequence
(Pertains to Study Periods Only)

It is difficult for many people to grasp the concept of the out-of-doors as a laboratory for learning. The following sequence has been prepared to show how the outdoors is used as a learning environment. This should not be construed as being complete. The phrase "(Pertains to Study Periods Only)" means exactly that. Please keep in mind that other subjects such as music, language arts, early California history, arithmetic, etc. are integrated into this program.

POINT OF DEPARTURES

This sequence concerns itself with the following objectives to be achieved by the end of the week study period at the resident outdoor school.

I. That the students are able to make generalizations relative to man's activities and the balance of nature.

II. That they have concepts of producers, consumers and reducers.

III. They further have concepts of environments, communities, adaptation, and competition.

IV. That they have some authentic experiences related to the out-of-doors.

Our efforts to achieve these objectives cover many related experiences. A general outline of the sequence is as follows:

I. Standard setting and organization.

II. Introduction to the outdoor school setting and overall environment.

III. Introduction to the forest environment, plant and animal communities.

A. Introduction to presence and absence of various plant forms.

B. Introduction to concept of ecological succession -- seed migration, adaptation, aggregation, competition, and climax growth.

C. Introduction to concept of green plants as producers.

D. Introduction to land forms, soil types and soil building and watershed.

IV. Stream environment, its plant and animal communities.

A. Discuss water erosion, transportation and deposition concepts.

B. Sampling of aquatic life in relation to siltation.

C. Relation of siltation to man's activities, weather (rainfall) and ground cover.

D. Observation of plant forms in contrast with forest plant forms.

E. Relate watershed, stream maintenance to aquatic and plant life.

F. Observe condition in relation to suitable habitat for aquatic life.

V. Introduction to meadow and chaparral environment and its plant and animal communities.

A. Observations of presence and absence of various plant forms (contrast with forest and stream environments).

B. Observation of ecological succession.

C. Observe soil types.

D. Develop concept of overlapping cycles (forest and meadow supporting some consumers).

E. Make close observation of various insect and animal life in small measured areas.

F. Observe any activities exotic to the area.

VI. Discussion and review period.

A. Review all previous environments.

B. Discuss concept of producers, consumers and reducers.

C. Review cycle i.e. weather, plant life, and so forth.

D. Compare in contrast similarities and differences of the three previously studied environments.

VII. Introduction to the tide pool/ocean.

A. Discuss wave action, tides and formation of beaches and tide pools.

B. Observation of plant and animal life presence and absence of various forms.

C. Further develop concept of plant and animal adaptation to environment.

D. Speculate on ocean environment as a food producer for man.

E. Observe erosion and deposition and the ocean's part in the weather cycle.

VIII. Introduction to marsh, plant and animal communities.

A. Observation of plant and animal forms contrast with previously observed environments.

B. Observation of ecological succession.

C. Observe soil and moisture conditions.

D. Further develop concept of reducers and relate to cycle.

E. Further develop concept of adaptation.

IX. Observation of logging area.

A. Study of undisturbed forest area.

B. Contrast with logged area.

C. Study tree growth and harvest operation.

D. Discuss economics and need of lumbering in relation to conservation.

E. Consider reforestation and conservation practices for the area.

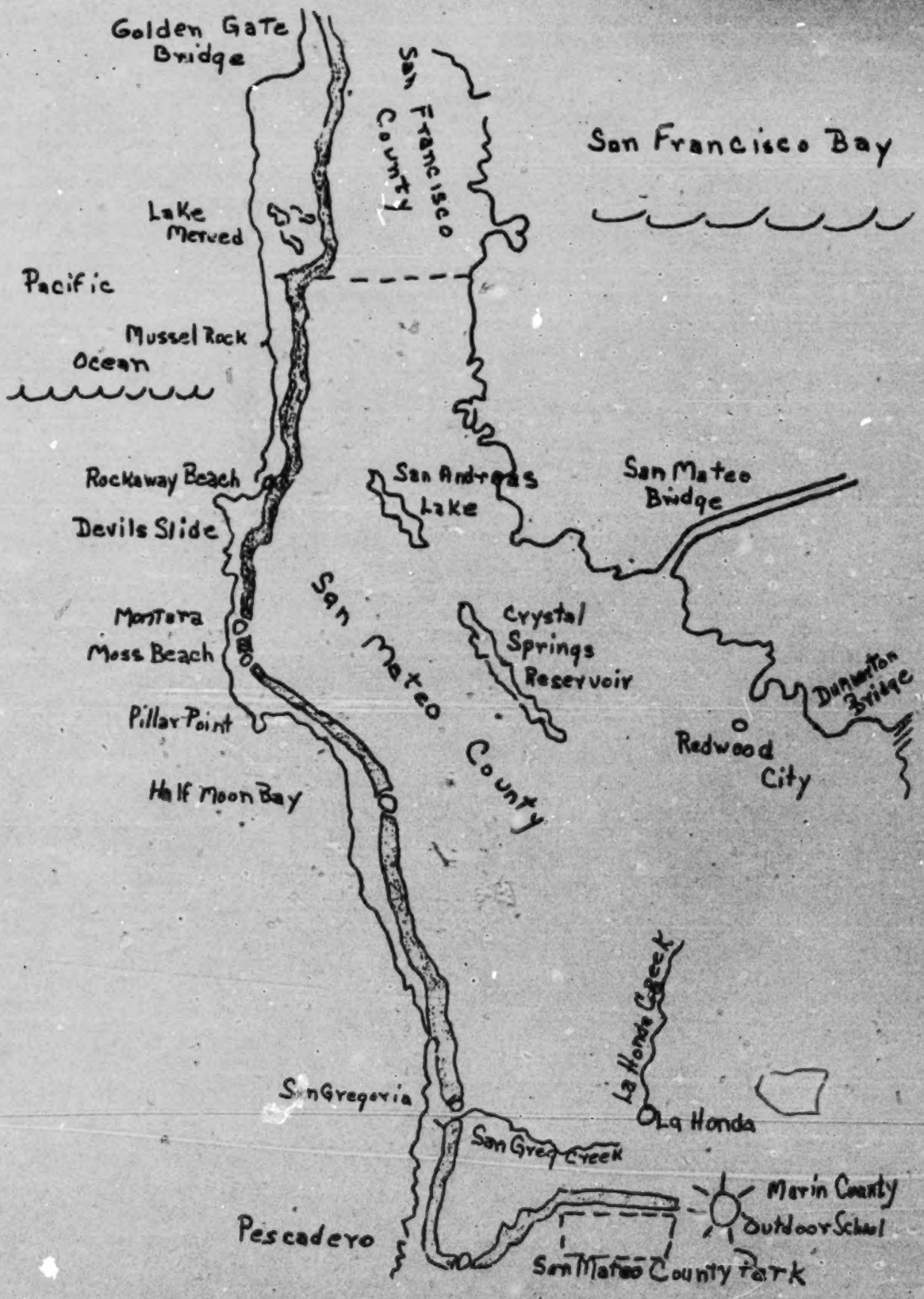
X. Conduct experiments and make final observation (science lab setting).

A. Run soil tests relating to plant types of various environments.

B. Make close observation of soil building (sample from watershed area).

C. Oral discussion of all terms, environments and concepts.

D. Oral evaluation of the week.


Golden Gate Bridge
San Francisco County
San Francisco Bay
Lake Merced
Pacific
Mussel Rock
Ocean
Rockaway Beach
Devils Slide
San Andreas Lake
San Mateo Bridge
Montara
Moss Beach
San Mateo
Crystal Springs Reservoir
Dumbarton Bridge
Pillar Point
Redwood City
Half Moon Bay
San Mateo County
La Honda Creek
San Gregorio
La Honda
San Greg Creek
Marin County Outdoor School
Pescadero
San Mateo County Park

OFFICE OF MARIN COUNTY

OUTDOOR SCIENCE AND CONSERVATION EDUCATION PROGRAM

"ALONG THE WAY"

A ROUTE TO MARIN COUNTY'S RESIDENT OUTDOOR SCHOOL

Leaving Marin County, the route will take us south on Highway 101. We will pass above Sausalito, cross the Golden Gate Bridge and continue south on 19th Avenue. From 19th Avenue we will turn west on Lincoln Way, pass through a portion of Golden Gate Park to Sunset Avenue. Once again, we will turn south on Sunset Avenue to the Sloat Blvd. turnoff. Traveling one-half mile west on Sloat Blvd., we will pick up State Highway 35 and again continue our southward trek. State Highway 35 takes us into Highway No. 1, perhaps the most famous of California's routes. Here on Highway 1, with the ocean on our right, we will pass through or nearby the following towns, cities and communities: Daly City, Pacifica, Sharp Park, Rockaway Beach, Montara, Moss Beach, Half Moon Bay, Martins Beach, San Gregorio and Pescadero. Reaching the Pescadero Road, we will turn east and travel 10 miles to the entrance of the Redwood Glen Baptist Conference grounds which is Marin County's resident outdoor school. To make your trip more enjoyable we have listed below some interesting facts about things to see along the way.

GOLDEN GATE

The Golden Gate is the name given to the entrance of San Francisco Bay. The channel measures 4 miles long and about 1 mile wide. It is deep enough for the largest ships. The English explorer, Sir Francis Drake, saw the Golden Gate in 1578 and may have given it its name. However, the American explorer, J. C. Fremont, claims in his memoirs that he named the Golden Gate. The 49'ers en route to the gold fields regarded the name as a good luck symbol.

GOLDEN GATE BRIDGE

The Golden Gate Bridge is one of the largest and most spectacular suspension bridges in the world. It spans the Pacific Ocean for a distance of 6,450 feet to connect northern California to the Peninsula of San Francisco. The two towers stand on either side of the bridge about 1,125 feet from the edge. They hold up the two steel cables, each 36½ inches in diameter, from which the bridge hangs. The center section of the bridge between the towers is 4,200 feet long. The floor of the bridge is 220 feet above the water and is 90 feet wide. Joseph B. Straus designed the bridge and it was completed in May, 1937 at a cost of $35,500,000.

SAN FRANCISCO

San Francisco lies on the largest land-locked harbor in the world. Its stormy history has made San Francisco one of the most dramatic of cities. San Francisco has burned to the ground 7 times in the last hundred years. Its great fires, together with huge immigrations, earthquakes, waterfront strikes, and the city's part in wars, have shaped the character of the city. Today San Francisco's waterfront, famous restaurants, and colorful history have made it the great "story city" of America. Mark Twain, Jack London, Robert L. Stevenson, Bret Harte, Richard Henry Dana and others have set stories in San Francisco. People from more than 30 nations make their home here. Various nationalities live in colorful districts within the city. The most famous of these sections, or districts, is Chinatown.

ALONG THE WAY (cont.)

GOLDEN GATE PARK

"Golden Gate Park in San Francisco is a horticultural wonder of the world. Eighty-four years ago most of its 1014 acres were windswept sand dunes, rocky knolls and seepage ponds. Modern gardening, in one of its greatest undertakings, has transformed that wasteland into the flower lover's paradise it now becomes each spring when azaleas, camillias, cherry trees, quince trees, peach trees, plum trees and America's finest collection of rhododendrons all come into bloom.

"Yet one of the most unusual things about this park is a negative fact: never in its history has it tolerated a KEEP OFF THE GRASS sign. Instead, its welcome mat is so far out that the park has slowly turned into a recreational department store with something for almost everyone.

"Culturally, it has the De Young Museum and Art Gallery, one of the best in this part of the country. There is the Steinhart Aquarium the second largest in the United States - the largest is Chicago's Shedd Aquarium.

"There is a big glass conservatory, an arboretum and brand-new planetarium. Science is given a popular touch at the century-old California Academy of Sciences. Behind the Academy is a Shakespeare Flower Garden. In front of both is an outdoor music auditorium accommodating 20,000, where, weather permitting, you can listen to a band concert every Sunday.

"Sportswise, the park includes the 60,000-seat Kezar Stadium, scene of the annual New Year's Day East-West football game. There are two baseball diamonds, a polo field and stadium, a model-yacht club on Spreckels Lake, boating on Stow Lake, an archery field, bowling greens, fly casting pools, bridle paths, soccer and volleyball fields, handball, tennis and horseshoe courts. And, if you don't object to par-3 holes, you can even play golf on a nine-hole pitch-putt course.

"All these facilities still leave room for a big children's playground with a carrousel and a miniature farm, a japanese Tea Garden, and numerous glens, woodlands, meadows and vales."

LAKE MERCED

Lake Merced was named in 1775 on the feast day of our Lady of Mercy by the Spanish settlers who were there. Although now a fresh water lake, the depression was once filled with ocean water and formed a bay rather than a landlocked lake. Over long periods of years sand brought in by ocean currents, together with wind-driven sand, have blocked off the Bay entrance, and fresh spring water has supplanted salt water. Lake Merced was a major source of water for the city of San Francisco from 1877 up to the development of the Hetch-Hetchy and other Sierra projects. It is now only for an emergency source of supply. The Lake was discovered in 1774.

ALONG THE WAY (cont.)

THE CITY OF PACIFICA

The new city of Pacifica was incorporated on November 22, 1957. To this region the Spanish missionaries gave the name, San Pedro. Fray Francisco Palou, when he first saw it in 1774 made note of it as a good place for a settlement and when he later found himself in charge of Mission Dolores in San Francisco, and frustrated with trying to grow food crops in the fog, he remembered San Pedro. In 1785 he made experimental plantings in the valley. The results were so good that the following year he not only planted more crops but erected a grainary and temporary living quarters and dedicated a chapel on the spot where now stands the Sanchez adobe. Other buildings followed, leading the forming of a closed quadrangle. Today Pacifica is a booming residential community with a current population of 35,000 and an estimated population in 1980 of more than 60,000. Over 60% of the residents of Pacifica are employed in San Francisco.

MUSSEL ROCK

Mussel Rock is locally known as fog-gap. There are many hazardous cliffs and sunken areas at this location where a huge landslide occured which resulted in part from the earth's movement during the San Francisco earthquake in 1906. Between Mussel Rock and San Pedro Point there are a number of recently developed subdivisions and beach resorts. Among these subdivisions is Sharpe's Park which adjoins 480 acres of land given to the city of San Francisco for a park by Mrs. Hanora Sharpe. The park was the start of the municipal golf course now there and also includes much undeveloped beach open to the public.

ROCKAWAY BEACH

This was a very popular resort in the earlier days. The area was named after Rockaway, Long Island. The name means "sandy land" in Delaware-Indian language. The northern part of this area is made up of limestone of the Franciscan formation of the San Andreas fault. A large quarry has been driven into it from which crushed rock has been produced for more than 50 years. It is still visible from Route 1. This dense gray limestone makes good road metal and concrete aggregate and the quarry is easily accessible. An interesting feature of the limestone in this quarry is that it is filled with the remains of a sub-microscopic animal called "Foraminifera". They are barely recognizable with the naked eye, but are fairly well seen under lenses, where they look very much like glassy pinheads. In the spring the hills are covered with wildflowers native to seashore location.

DEVIL'S SLIDE

Devil's Slide is a shute-like rock slide swept constantly by strong waves which keep undercutting on the beach below. The roadbed is cut across it so that its original height has been lowered, but it still extends several hundred feet from the road to the beach, and the rock retaining wall is definitely not a good observation point for anybody timid! In spite of many holy names used throughout the state, the Prince of Darkness has succeeded in having his name attached to this one. As we continue along about 1.6 miles from Devil's Slide we will see the name of the McNee Ranch. This is an excellent place to observe a wave-cut terrace which is about 75 feet above the level of the sea. Here is an excellent example of the fluctuations in sea level which have been great in this area. This old seashore extends to the outskirts of Montara Village.

ALONG THE WAY (cont.)

MONTARA AND MOSS BEACH

The name "Montoro", was used for the mountain and the point by the J.D. Whitney survey in 1867, and in 1869 the present spelling form was used by the Coast Survey. Both of these names are probably mis-spellings of one of the several similar Spanish words referring to forest and mountain. A "Canada Montosa", (valley full of woods and thickets) was shown about 1838 on the map of the San Pedro Rancho upon which the peak point and the town is located. Montara and Moss Beach are small residential communities which were sub-divided in 1906 about the time of the San Francisco earthquake. Montara is partly a beach resort and partly a flower-growing community. It sends millions of blooms to large cities each year. There are acres and acres of straw flowers often called "everlasting flowers" which are grown primarily along this coastal area. Over 20 million flowers are shipped each year. On nearby Montara Point a Coast Guard fog whistle and United States Navy Radio Compass station are maintained.

Moss Beach was named for the sea moss, growing on the coastal rocks, and unusual offshore marine gardens. Moss Beach and Seal Cove are the last of the beach resorts which center about Montara Point. The San Gregorio fault is well seen on the beach and sea cliffs at Moss Beach. Added note - J.D. Whitney (1819-1896) (Josiah Dwight) was state geologist of California. The first geologist to accurately measure the height of Mt. Whitney (14,495 ft.) which bears his name.

HALF MOON BAY

The town of Half Moon Bay takes its name from the beautiful crescent bay along which it lies. Once known as Spanishtown it is now famous for its artichokes. This area was first visited by members of Portola's expedition in 1769 and had its beginnings in the early 40's as parts of two land grants made out to gentlemen named Vasquez and Miramontes. The village that developed around the haciendas of these men was known as "Spanish Town" long after it was lain out or plotted in 1863. It was in the twentieth century that the name changed to Half Moon Bay. It is primarily a community of Italian-Portuguese descent. Although located in deep water and somewhat protected by Pillar Point, Half Moon Bay is too open a bay to make a first-class harbor without development of breakwater facilities, and this is now being studied as one of the best locations for setting up a series of adequate harbors for the fishing boats along the coast. Half Moon Bay, early records show, was used by whalers, trading vessels and rum runners. Oil has been taken from the Half Moon Bay piers near Princeton for many, many years. There is a small airport at Half Moon Bay which caters mostly to private planes. This is also a dairying area. The city of Half Moon Bay was incorporated on July 15, 1959. To the east, the Santa Cruz mountains serve as a natural barrier between this town and the bayside of the San Francisco peninsula.

ALONG THE WAY (cont.)

SAN GREGORIO

The name of St. Gregory was given to a land grant in 1839 and was given to the post office as a town name in the 1860's. This town is now a farming center and was once proposed as a mission site by Father Crespi with the Portola expedition. It now consists of almost "a handful of houses". This town is located where the San Gregorio fault passes out to the sea. This is one of several faults in the coast-range mountains in this area. It was a very active fault in late geological times. Oil has been produced in small quantities in the San Gregorio area and is of extremely high gasoline content. Sustained production is about 5 to 8 barrels a day, but with the present production costs so high, most of the wells are idle.

PESCADERO

In maritime Spanish the word means "fishing place". The beach is noted for agates, opals, and moonstones. Butano Falls are about six miles inland from the town. Pescadero is noted for the straw flowers which grow there and best in foggy weather. This interesting industry employs many of the men and women of the community in the planting, cultivating and packing of these flowers. These flowers are shipped all over the world. They look like small chrysanthemums and are varied colors. They are started from seeds and are planted September thru April. When ready they are picked by hand. After being picked they are taken to sheds where the workers fasten a piece of wire to each bloom. Then they are placed in very hot ovens to dry or dehydrate. They are kept at 125 to 140 Degrees for at least 24 hours. When dried they will look fresh for at least a year.

PIGEON POINT

This community, which lies south of Pescadero, is worth mentioning as having some importance to this area. The old lighthouse was built in 1872 and named after the Bostonian Carrier, "Pigeon", which was wrecked there in May of 1853. Curiously, the weight hanging in the tower center originally operated the lens, and the rope was wound by hand. If the power failed, it would be used by re-winding, again and again. The Spanish name for Pigeon Point was shown on several early records as the Point of the Whales.

LA HONDA

La Honda is a nearby community worth mentioning because of its historical value to this area. La Honda, or Hondo, in San Mateo County, was listed on a land grant in 1856. The post office was registered as such in 1880. Some of Portola's men established a camp here. La Honda, today, is a resort town. It is located among the redwoods in an area prospected for oil during the years 1925 to 1935. None of the wells were successful although showings of oil and gas were found in them. One well reached a depth of 3, 140 feet. Near the small community of La Honda are the redwoods of the San Mateo County Memorial Park. This park is just east of Marin County's Resident Outdoor school. Among these redwoods is a single giant redwood that dwarfs the other forest trees. It is well over 35 feet in diameter, is 275 feet in height, and has been estimated to be over 1500 years of age. There are very few redwoods that large in the coast ranges south of San Francisco. In this La Honda area, lumbering at one time was an important industry, and small lumber mills were located along the many creeks. You will also find that the nutmeg tree grew here in many numbers. In the olden days the ships that anchored at the nearby coastal harbors came to get the hardwood from the nutmeg tree to be used in the making of the ship's blocks and other tools needed for these clipper vessels. The nutmeg tree looks some-

ALONG THE WAY (cont.)

LA HONDA (cont.)

thing like a pine tree. It has short needles and bears small brown nutmegs about the size of a walnut. There are also many buckeye, alder, willow, California laurel, box elder, oak and cypress trees. This forest of mixed coniferous and broad-leafed trees includes, too, the madrone, big-leafed maples and tanbark oak. Many of the best redwoods have been logged off. Only scattered monarchs, many hundreds of years old, remain, and second growth trees are quite plentiful.

SAN MATEO COUNTY

San Mateo County, through which we have been traveling, was carved out of San Francisco County and named in 1856. It is mentioned in the diaries of De Anza in 1776. The early history of the area of San Mateo County is extremely interesting. An expedition led by Captain de Portola, the governor of Baja, California, established presidios or military forts in the area. Portola was searching for Monterey Bay and in the thick fog traveled on up the San Mateo Coast instead, and set up camp at Pescadero on the Gazos Creek. They liked it here because of the availability of the water and because of this the Pueblo or village at San Gregorio was also established. Others of his group went into the region of La Honda while more camped at Half Moon Bay. Proceeding northward, they wound their way over the hills toward Millbrae and it was from here in San Mateo County that they saw the San Francisco Bay for the very first time. This camp is now covered by the waters of the San Andreas Lake. They later moved north, as far as Searsville near Redwood City. Still unhappy with the fact that they did not yet find Monterey Bay, they sailed home to Mexico.

Office of Virgil S. Hollis, Marin County Superintendent of Schools

MARIN COUNTY SCHOOLS OUTDOOR SCIENCE AND CONSERVATION EDUCATION PROGRAM

Date _____

Dear Parents:

In a few weeks the _____ grade of _____ School will have the opportunity to attend school in the mountains at Marin County Outdoor School for a period of five (5) days. The activities in this outdoor education program will include experiences in conservation, nature study, hiking, outdoor science, weather study, and exploration.

This outdoor school trip can be one of the high spots of your child's educational experiences. This will be a carefully planned learning project that cannot be duplicated in the city classroom. Conservation and the value of our watersheds and timber resources may be learned best when contacted directly in their natural setting. Democratic group living in an outdoor environment affords opportunities for healthful living character development, and social adjustment which can rarely be found elsewhere. The Marin County Outdoor School is located on the La Honda-Pescadero Road, 68 miles south of Corte Madera.

DATE: School bus leaves _____ School at 9:00 a.m. on (day) Monday (month) _____ and returns to school before 1:45 p.m. on (day) Friday (month) _____.

COST: $_____. This is the total fee and covers food costs for twelve meals and lodging costs for four (4) nights.

FACILITIES: A large lodge, showers and lavatories, kitchen, dining room, cabins for sleeping, science room, and library.

SUPERVISION: Students will be under the supervision of the Outdoor School staff and _____, their teacher.

ADDRESS: The address is: Marin County Outdoor School, c/o Redwood Glen Baptist Camp, Loma Mar, Ca. 94021. Most students appreciate a letter or card from home. You should write to your child early in the week. We encourage each pupil to write to his/her parents. Pupils should bring several sheets of writing paper and stamped envelopes.

TELEPHONE: The telephone number of the Outdoor School is (415) 879-0320. Please do not call your child except in case of emergency. In case of an emergency at the Outdoor School, the director will contact the school and/or parents.

WHAT TO BRING:	Clothing and equipment of each student should be initialed to help prevent loss and confusion. New or expensive clothing is not desired.
REQUIRED:	All students must bring one (1) double sheet, two (2) blankets, or sleeping bag. LUNCH FOR FIRST DAY.
LIVING ACCOMMODATIONS:	Students live in dormitories or cabins while at the Outdoor School. The beds are furnished with mattresses and covers. The cabins and dormitories are heated.
FOOD:	Well-balanced meals prepared by trained cooks are served "family style". If your child has a food allergy, please indicate it on the health form.
CLOTHING:	Your child should bring the clothing indicated on the clothing list. This is a minimum list and additional clothes may be taken. We feel that warm jackets and sweaters are most important. It is also desirable to have rain gear during the wet season. A pair of rubber overshoes or boots are also valuable in case of rain. Please contact the school administrator if you have any problems or questions concerning clothing.
HEALTH:	We wish to do everything possible to properly care for each pupil who participates in the outdoor program. If you child has been under a doctor's care recently, please obtain a statement signed by the doctor which will allow the child to participate in the program. This statement should be presented to the teacher prior to leaving. Please fill out all health forms carefully and completely.
INSURANCE:	Your child is covered by a health and accident policy carried by the Outdoor School Camp. Fifty cents (50¢) of the outdoor education fee is the insurance premium.
MONEY:	Please do not send money with your child. There is no place where they can spend money and it sometimes creates the problem of theft and/or loss.

EQUIPMENT:

Essential Items

2 blankets, 2 sheets or a sleeping bag
2 towels (bath size)
1 washcloth
1 toothbrush and toothpaste
1 bar soap
1 comb or hairbrush
1 box kleenex - small
2 or 3 pairs jeans, cords, heavy trousers, or slacks
1 rubber sheet (if needed)
1 pair rubber overshoes or boots (seasonal)
3 T-shirts or undershirts
5 underpants
1 raincoat (seasonal)
6 pairs socks
1 heavy cotton or wool flannel shirt
3 lightweight shirts - long sleeves
1 pair pajamas
1 heavy jacket, coat or sweater
2 pairs shoes - tennis shoes are satisfactory
1 swimsuit (girls); trunks (boys) - (seasonal)

Optional Items

flashlight
camera - film
musical instruments (small)
compass
pillow (not furnished)
bedroom slippers or shower shoes
bathrobe

ITEMS THAT MAY NOT BE TAKEN:

knives
candy
comic books
hatchets
radios
money

* HEALTH FORM *

Student's Name_____ Age_____Grade_____Sex_____
(Last) (First)

Home Address_____ Phone_____
(Number) (Street) (City)

Parent's Name_____Bus. Add._____ Phone_____

Doctor's Name_____Bus. Add._____ Phone_____

To protect your child from possible embarrassment, but not exclude him from the program, the following information is needed:

1. Do you know of any health factor that makes it advisable for your child to follow a limited program of physical activity?_____ Please explain._____
_____

2. Has your child been exposed to any communicable disease within the past 21 days?_____
If yes, which one?_____

3. What is the approximate date of your child's last tetanus shot?_____

4. Does your child walk in his sleep, wet the bed at night? Specify_____

5. Does your child suffer from asthma, allergies, etc? Specify_____

6. Does your child take medicine regularly?_____ If yes, please send instructions.

7. May the Outdoor School Principal give your child aspirin if necessary? Yes_____No_____

Permission for Emergency Treatment

If any emergency arises it may become necessary for a physician to attend your child before the staff could get in touch with you. Please sign the following statement which permits emergency care. (If you do not authorize emergency care, sign the second statement. Acceptance of such applicants will be reviewed by the County Superintendent's Office before admission to the Outdoor School is granted.)

PERMISSION GRANTED

I hereby authorize the Marin County Outdoor School to provide medical or surgical care, including care rendered through the facilities of a physician or hospital, for (name of child) _____ in any emergency which may arise while he/she is in attendance at the Outdoor School.

_____
Signature of Parent or Guardian

PERMISSION NOT GRANTED -- DO NOT OFFER EMERGENCY TREATMENT

I DO NOT authorize emergency medical treatment for the following reasons:_____
_____

_____
Signature of Parent or Guardian

School_____

Date_____